Appendix A

This appendix presents the results from the alternative models that are compared to the main results in section 6.2.

**Figure 1:** Results using DEA estimator

Source: Author’s computations. Note: The regions are denoted in the following way: 10 = capital city Prague, 20 = Central Bohemian, 31 = South Bohemian, 32 = Plzeň, 41 = Karlovy Vary, 42 = Ústí nad Labem, 51 = Liberec, 52 = Hradec Králové, 53 = Pardubice, 63 = Vysočina, 64 = South Moravian, 71 = Olomouc, 72 = Zlín, 80 = Moravian-Silesian.
Figure 2: Results using FDH estimator

Source: Author’s computations. Note: The regions are denoted in the following way: 10 = capital city Prague, 20 = Central Bohemian, 31 = South Bohemian, 32 = Plzeň, 41 = Karlovy Vary, 42 = Ústí nad Labem, 51 = Liberec, 52 = Hradec Králové, 53 = Pardubice, 63 = Vysočina, 64 = South Moravian, 71 = Olomouc, 72 = Zlín, 80 = Moravian-Silesian.

Figure 3: Results using PFA estimator

Source: Author’s computations. Note: The regions are denoted in the following way: 10 = capital city Prague, 20 = Central Bohemian, 31 = South Bohemian, 32 = Plzeň, 41 = Karlovy Vary, 42 = Ústí nad Labem, 51 = Liberec, 52 = Hradec Králové, 53 = Pardubice, 63 = Vysočina, 64 = South Moravian, 71 = Olomouc, 72 = Zlín, 80 = Moravian-Silesian. Prague is not included in the graph of frontier, figure (a), to allow better visibility of the super-efficient observations, lying above frontier.
Figure 4: Results using SFA estimator - production frontier (pooled data - COLS)

Source: Author’s computations. Note: The regions are denoted in the following way: 10 = capital city Prague, 20 = Central Bohemian, 31 = South Bohemian, 32 = Plzeň, 41 = Karlovy Vary, 42 = Ústí nad Labem, 51 = Liberec, 52 = Hradec Králové, 53 = Pardubice, 63 = Vysočina, 64 = South Moravian, 71 = Olomouc, 72 = Zlín, 80 = Moravian-Silesian.

Figure 5: Results using SFA estimator - production frontier (panel data - fixed effects)

Source: Author’s computations. Note: The regions are denoted in the following way: 10 = capital city Prague, 20 = Central Bohemian, 31 = South Bohemian, 32 = Plzeň, 41 = Karlovy Vary, 42 = Ústí nad Labem, 51 = Liberec, 52 = Hradec Králové, 53 = Pardubice, 63 = Vysočina, 64 = South Moravian, 71 = Olomouc, 72 = Zlín, 80 = Moravian-Silesian.
Figure 6: Results using SFA estimator - cost frontier (pooled data - COLS)

Source: Author’s computations. Note: The regions are denoted in the following way: 10 = capital city Prague, 20 = Central Bohemian, 31 = South Bohemian, 32 = Plzeň, 41 = Karlovy Vary, 42 = Ústí nad Labem, 51 = Liberec, 52 = Hradec Králové, 53 = Pardubice, 63 = Vysočina, 64 = South Moravian, 71 = Olomouc, 72 = Zlín, 80 = Moravian-Silesian.

Figure 7: Results using SFA estimator - cost frontier (pooled data - MLE)

Source: Author’s computations. Note: The regions are denoted in the following way: 10 = capital city Prague, 20 = Central Bohemian, 31 = South Bohemian, 32 = Plzeň, 41 = Karlovy Vary, 42 = Ústí nad Labem, 51 = Liberec, 52 = Hradec Králové, 53 = Pardubice, 63 = Vysočina, 64 = South Moravian, 71 = Olomouc, 72 = Zlín, 80 = Moravian-Silesian.